UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/975,267	11/20/97	NITSCHKE D	GLT1595PUS(P

IM22/0316

JAMES A KUSHMAN
BROOKS & KUSHMAN
1000 TOWN CENTER
TWENTY-SECOND FLOOR
SOUTHFIELD MI 48075

EXAMINER	
RULLER, J	

ART UNIT	PAPER NUMBER
1731	12

DATE MAILED: 03/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 12

Application Number: 08/975,267
Filing Date: 11/20/97
Appellant(s): D. Nitschke, E. Mumford, D. Nitschke

James A. Kushman
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 12/28/99.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. There are none.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The amendment after final rejection filed on 12/28/99 has been entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

A statement identifying that the claims stand or fall together is contained in the brief.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,470,838	McMaster et al.	9/11/1984
5,092,916	McMaster	3/3/1992
5,445,508	Kubo et al.	8/29/1995
5,643,615	Austin	7/1/1997

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1,5,13,15, and 16 are rejected under 35 U.S.C. 103.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster (5,092,916) in view of Kubo et al. (5,445,508). McMaster teaches all that is recited except a lower mold support assembly to which the lower mold is transferred from the mold shuttle. Specifically, McMaster teaches a glass sheet heating furnace (14), an upper mold support (26), a lower mold shuttle (20), and alignment means (22 and 30)for the upper mold relative to the lower mold (See col. 3, lines 32, 54 and 61 and col. 4, line 15). Kubo et al. teach a vulcanizing mold setting apparatus comprising a mold carriage (49) for supporting the mold mount and transferring it to the lower heating plate (6) and a pair of mold supports (24) each with two clamping members (26)(a total of four clamping members; claim 5). Kubo et al. also teach a centering mechanism for centering the mold on the lower heating plate (col. 3, lines 46-68). In col. 7, line 35, Kubo et al. Teach that the mold carriages in all of the taught embodiments may be unmanned automotive mold carriages. It is presumed that if the carriages are unmanned, then there must be some means to automatically control their movement which would suggest that they could be programmed to move by themselves. If this is the case, then a cyclic program could be established. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the mold carriage and mold supports of Kubo et al. for the shuttle of McMaster so that once the shuttle delivers the mold to the forming area, it is free to move out of

the way of operation thus increasing the life of the shuttle or leaving it free to perform another task. It also would have been obvious to one of ordinary skill in the art at the time of the invention to cyclically control the movement of the carriage and thus the mold, to produce a consistent process with consistent glass sheet production.

1. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster in view of Kubo et al. as applied to claim 1 above, and further in view of McMaster et al. (4,470,838). McMaster in view of Kubo et al. teach all that is recited in claim 16 except the quenching station. McMaster et al. (4,470,838) teach a quenching station with upper and lower blastheads (18 and 20) with quench gas feeding through them. A bent glass sheet is moved on a open center ring type mold by a shuttle from the molding station to the quench station between the blastheads (col. 4, lines 36-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the quenching station of McMaster et al. (4,470,838) to the apparatus of McMaster to provide quenching capability along with the molding apparatus to improve the efficiency of the process of making glass sheets.

2. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster in view of Kubo et al. in view of McMaster et al. as applied to claims 13 above, and further in view of Austin. McMaster, Kubo et al., and McMaster et al. teach all that is recited in claim 15 except a railway having a pair of spaced rails. Austin teaches an apparatus for forming workpieces that

includes carts for carrying the dies(molds) and parallel tracks along which the carts ride (col. 5, lines 31-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a railway system of Austin to efficiently move the shuttle of McMaster. This rejection is set forth in prior Office action, Paper No. 5.

(11) Response to Argument

Applicants argue that the Kubo et al patent is non-analogous art to the glass sheet forming apparatus involved with the present invention and that the proposed combination of McMaster with Kubo et al is not proper. The Examiner argues that the both McMaster and Kubo et al teach molds and mechanisms that move the molds. There is nothing in the claims on appeal, as recited, that limit the mold of the instant invention to glass sheets. Both patents teach a mold shuttle or mold carriage and it seems that it would have been obvious to look to one or the other to optimize a similar system. Applicants argue that Kubo et al do not teach the support of a lower mold for horizontal movement for alignment with an upper mold during cyclical operation. The Examiner argues that it is the support assembly of the Kubo et al reference that is being added to the apparatus of McMaster in the 103 rejection. The McMaster apparatus is being modified in that the support assembly of Kubo is added so that the mold shuttle of McMaster would carry the bottom mold to the support assembly (allowing horizontal alignment of the mold) and drop it off, so that the shuttle could go perform another

function or at least be out of the way of the press operation to increase its lifetime. The support assembly of Kubo does allow for horizontal movement, see balls (42) and guide plate (44) and stopper (25), see col. 4, lines 36-52. The fact that Kubo moves both the bottom and top molds together is of no consequence, because McMaster moves the bottom mold under the top mold and the same would be true in this case if McMaster was modified by Kubo.

Respectfully submitted,

Stanley S. Silverman
Supervisory Patent Examiner
Technology Center 1700

JAR
March 9, 2000

James A. Kushman
Brooks & Kushman
1000 Town Center
Twenty-Second Floor
Southfield, MI 48075